ABSTRACT OF THE DISCLOSURE

A system and method for providing high availability for telecommunications and data communications by implementing a network bus architecture at a card level. The network bus architecture, which may be a combination of hardware, software, and APIs, replaces the conventional midplane/backplane as the system bus for PCI purposes. The system provides physical redundancy to the system by connecting ports of the various system cards using dual/redundant ethernet switches. Further, since the system cards are connected through network connections, failure of any component is interpreted and addressed as a network failure instead of as a hardware failure.